WHAT IS CLAIMED IS:

1. A grinding tool inserted to a hole provided in a subject to be worked while rotating so as to grind the inner surface of the hole, comprising:

a tool main body in which abrasive grains such as diamond powders or the like are adhered to at least a portion of the outer surface in the axial direction and that portion consists of a grinding portion; and

a working member in which a working portion is provided in the front portion to perform working processes before or after grinding of the inner surface in the subject to be worked and a rear portion that is combined to the tool main body to be able to be attached thereto and removed therefrom in such a way as to maintain the working portion to the front end side of the tool main body.

2. The grinding tool according to Claim 1, wherein said tool main body in which at least the front end portion in the axial direction is formed in a cylindrical shape, slits in the axial direction are provided in a portion in the axial direction of the cylinder portion at a predetermined interval in a circumferential direction, abrasive grains such as diamond powders or the like are adhered to the outer surface thereof so as to form an expandable grinding portion in the axial portion, and an expanding member press-fitted within the grinding portion to expand the grinding portion, thereby adjusting the outer diameter of the grinding portion.

3. The grinding tool according to Claim 2, wherein

a female screw portion is provided in the inner surface of the front end portion of the cylinder portion, and the working member has a male screw portion to be screwed into the female screw portion in the outer surface of the rear portion, and the working portion is in the front portion.

4. The grinding tool according to Claim 3, wherein a male screw portion to be screwed into the female screw portion of the tool main body is provided on the outer surface of the front portion, and an expanding head to be press-fitted into the grinding tool is provided in the rear portion.

5. The grinding tool according to Claims 1, 2, 3, or 4, wherein the working member is provided with a grinding reamer and rotating brush.

6. The grinding tool according to Claims 2, 3, or 4, wherein the inner surface of the grinding portion is constituted by a taper surface which has a diameter which is gradually reduced toward the rear end side, and an expanding member that expands the grinding portion by operating an expanding head press-fitted in the grinding portion in the axial direction.

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